The opinion in support of the decision being entered today was \underline{not} written for publication and is \underline{not} binding precedent of the Board.

Paper No. 24

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte MICHAEL J. SULLIVAN,
DENNIS R. NESBITT, and JOHN L. NEALON

Appeal No. 2002-0109 Application No. 09/110,221

ON BRIEF

Before ABRAMS, FRANKFORT, and NASE, <u>Administrative Patent Judges</u>.
FRANKFORT, <u>Administrative Patent Judge</u>.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 through 13 and 17 through 20. Claims 14 through 16, the only other claims remaining in this application, stand withdrawn from further consideration by the examiner as not being directed to the elected species.

Appellants' invention relates to a high moment of inertia golf ball which is specifically designed and constructed to have a relatively low spin rate and a high coefficient of restitution The ball has a solid core including a filler material, such as tungsten, and a cover comprising an ionomer resin composition including a high quantity (i.e., 3.5 to 20 parts by weight based upon 100 parts by weight of resin) of a whitening agent selected from the group consisting of titanium dioxide, barium sulphite, and zinc sulfide. As noted on page 14 of appellants' specification, the high quantity of whitening agent serves the dual function of both providing the cover with excellent whiteness and providing outer perimeter weighting to the ball, which perimeter weighting provides a greater radius of gyration and thus generates lower initial spin than a conventional core weighted golf ball. The lower spin rate reduces slicing and hooking and enhances distance for less skilled players. A copy of representative claims 1, 17 and 20 can be found in the Appendix to appellants' brief.

The sole prior art reference of record relied upon by the examiner in rejecting the appealed claims is:

Matsuki et al. (Matsuki) 4,863,167

Sep. 5, 1989

Claims 1 through 13 and 17 through 20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Matsuki.

Rather than reiterate the examiner's full statement of the above-noted rejection and the conflicting viewpoints advanced by the examiner and appellants regarding the rejection, we make reference to the final rejection (Paper No. 10, mailed April 4, 2000) and the examiner's answer (Paper No. 21, mailed May 2, 2001) for the examiner's reasoning in support of the rejection, and to appellants' brief (Paper No. 20, filed February 14, 2001) and reply brief (Paper No. 22, filed July 2, 2001) for the arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to appellants' specification and claims, to the applied prior art Matsuki reference, and to the respective positions articulated by appellants and the examiner. As a consequence of our review, we have made the determination that the examiner's rejection will not be sustained. Our reasons follow.

In the examiner's view, Matsuki discloses a golf ball having a solid rubber core like that broadly claimed by appellants (col. 2, lines 41-51) and a cover made of an ionomer resin containing a titanium dioxide whitening agent (col. 3, lines 46-49 and Examples 1, 3 and 4). Recognizing that Matsuki does not disclose or teach the high level of whitening agent set forth in appellants' claims on appeal or the coefficient of restitution (COR) required therein, the examiner contends (final rejection, pages 2-3) that:

since the material used for the golf ball are the same it can be assumed the properties, such as the coefficient of restitution, will also be the same. Also, Applicant should be aware that simple variations in amounts of identical materials are (titanium dioxide) not patentable distinctions, unless the amounts can be proven to be critical to the invention. However, even if the quantity resulted in great improvement over the prior art the modification is still within the capabilities of one skilled in the art. Furthermore, the applicant has failed to show any criticality of the amounts of titanium dioxide used in the invention. It would have been obvious for one skilled in the art to modify the quantity of titanium dioxide in the invention of Matsuki et al in order to achieve optimum conditions for the golf ball.

In the answer (page 4), the examiner attempts to further justify the rejection by urging that where general parameters are set forth in the prior art it is not inventive to discover the

optimum or workable ranges by routine experimentation, citing <u>In</u> re Aller, 220 F.2d 454, 105 USPQ 233 (CCPA 1955).

Appellants correctly point out that Matsuki merely discloses an amount of titanium dioxide in the cover of the ball therein that is known in the art (i.e., 3 parts by weight) and otherwise provides no teaching, suggestion or motivation whatsoever of utilizing an amount of titanium dioxide different than that disclosed therein. In addition, appellants note that Matsuki provides no teaching of a COR of at least 0.750 as set forth in claims 1 and 18 on appeal, and no recognition of the effect upon the COR by the addition to the cover of at least 3.5 parts by weight of a whitening agent as recited in the claims on appeal. Appellants also point out that the amount of whitening agent required by the claims on appeal is a relatively large amount, and that such a large amount of whitening agent in the cover is critical to achieving the features described in the specification, i.e., 1) providing a cover with a vibrant white color, and 2) providing perimeter weighting, which promotes desirable low spin characteristics for the resulting ball.

In responding to the examiner's reliance on <u>In re Aller</u>, appellants note that the art of golf ball manufacture contains an almost limitless array of variables, and that the different compositions that may be used in golf ball manufacture and their concentration ranges are nearly infinite. Appellants also again point out that Matsuki neither teaches nor suggests increasing the whitening agent concentration above the 3.0 parts by weight mentioned therein and contends that it is impractical, if not impossible, to discover optimum concentrations of even known ingredients by routine experimentation without some incentive or suggestion to try a specific range.

Appellants conclude by arguing that the examiner's position is not based upon established principles under 35 U.S.C. § 103, but instead is based upon hindsight reconstruction and obvious to try reasoning to arrive at the claimed invention.

We fully agree with appellants' arguments as presented in the brief and reply brief, and with their position that there is nothing in Matsuki which would have provided any suggestion or motivation for one of ordinary skill in the art to contemplate an amount of whitening agent in the cover of a golf ball like that

required in appellants' claims on appeal. Lacking any credible teachings in the applied prior art itself which would appear to have fairly suggested the claimed subject matter as a whole to a person of ordinary skill in the art, or any viable line of reasoning as to why such artisan would have otherwise found the claimed subject matter to have been obvious in light of the teachings of the applied Matsuki patent, we must refuse to sustain the examiner's rejection of claims 1 through 13 and 17 through 20 under 35 U.S.C. § 103(a).

Accordingly, the decision of the examiner is reversed.

REVERSED

Neal E. Abrams)	
Administrative Patent	Judge)	
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Charles E. Frankfort)	BOARD OF PATENT
Administrative Patent	Judge)	APPEALS AND
)	INTERFERENCES
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)	
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